

**SYSTEMS AND METHODS FOR USING HDLC CHANNEL  
CONTEXT TO SIMULTANEOUSLY PROCESS MULTIPLE  
HDLC CHANNELS**

**ABSTRACT OF THE DISCLOSURE**

5        Systems and methods are disclosed for using High-level Data Link Control (HDLC) channel context information to simultaneously process multiple HDLC channels. Preferred embodiments of the present invention enable a single network processing engine to process multiple HDLC channels. The current state of the HDLC channel can be evaluated, stored, and restored, which means that the processing of a  
10      channel can be halted, the channel state read and stored, and the state of a different channel written to the processing engine. This allows the engine to begin processing a new channel, and then, at a later stage, restore the state of the original channel and resume processing.